No. 01-1300.

Please amend the application as follows:

In the Claims

Please cancel Claims 18-23.

Please amend Claims 1, 24, 26 and 27 as follows:

1. (Amended). An antigenic composition comprising a selected antigen from a pathogenic bacterium, virus, fungus or parasite and an effective adjuvanting amount of a mutant cholera holotoxin, wherein the holotoxin has reduced toxicity compared to a wild-type cholera holotoxin and has a substitution at position 29 of the A subunit of the cholera holotoxin, wherein the glutamic acid residue is replaced by an amino acid other than aspartic acid, and wherein said holotoxin enhances the immune response in a vertebrate host to said antigen.

24. (Amended). A plasmid containing an isolated and purified DNA sequence comprising a DNA sequence which encode an immunogenic mutant cholera holotoxin having a substitution at position 29 of the A subunit of the cholera holotoxin, wherein the glutamic acid residue is replaced by an amino acid other than aspartic acid, and wherein the DNA

sequence is operatively linked to an arabinose inducible promoter.

26. (Amended). A method of producing an immunogenic mutant cholera holotoxin, wherein the cholera holotoxin has reduced toxicity compared to a wild-type cholera holotoxin and has a substitution at position 29 of the A subunit of the cholera holotoxin, wherein the glutamic acid residue is replaced by an amino acid other than aspartic acid, which comprises transforming, transducing or transfecting a host cell with the plasmid of Claim 24 and culturing the host cell under conditions which permit the expression of said recombinant immunogenic detoxified protein by the host cell.

27. (Amended). Use of effective adjuvanting amount of a mutant cholera holotoxin, wherein the holotoxin has reduced toxicity compared to a wild-type cholera holotoxin and has a substitution at position 29 of the A subunit of the cholera holotoxin, wherein the glutamic acid residue is replaced by an amino acid other than aspartic acid, in combination with a selected antigen from a pathogenic bacterium, virus, fungus or parasite, to prepare

an antigenic composition, wherein said holotoxin enhances the immune response in a vertebrate host to said antigen.

Please add Claims 28-42 as follows:

28. (New). The method of Claim 17 wherein the antigenic composition comprises more than one antigen.

29. (New). The method of Claim 17 wherein the amino acid at position 29 is histidine.

30. (New). The method of Claim 17 wherein the selected antigen is the *Haemophilus influenzae* P4 outer membrane protein, the *Haemophilus influenzae* P6 outer membrane protein, the *Haemophilus influenzae* Hap_S protein, the *Helicobacter pylori* urease protein, the *Neisseria meningitidis* rpilin, the *Neisseria meningitidis* PorA protein, the respiratory syncytial virus fusion protein, a rotavirus virus-like particle or HSV gD2.

31. (New). The method of Claim 30 wherein the selected antigen is the *Haemophilus influenzae* P4 outer membrane protein, the *Haemophilus influenzae* P6 outer membrane protein, the *Haemophilus influenzae* Hap_S protein or any combination thereof.

32. (New). The method of Claim 30 wherein the selected antigen is the *Helicobacter pylori* urease protein.

33. (New). The method of Claim 30 wherein the selected antigen is the *Neisseria meningitidis* rpilin, the *Neisseria meningitidis* PorA protein or a combination thereof.

34. (New). The method of Claim 30 wherein the selected antigen is the respiratory syncytial virus fusion protein.

35. (New). The method of Claim 30 wherein the selected antigen is a rotavirus virus-like particle.

36. (New). The method of Claim 35 wherein the virus-like particle is a rotavirus 2/6-virus-like particle.

37. (New). The method of Claim 30 wherein the selected antigen is HSV gD2.

38. (New). The method of Claim 37 wherein the antigenic composition is a polynucleotide vaccine comprising plasmid DNA encoding HSV gD2.

39. (New). The method of Claim 17 wherein the antigenic composition further comprises a diluent or carrier.

40. (New). The method of Claim 17 wherein the antigenic composition further comprises a second adjuvant in addition to the mutant cholera holotoxin.

41. (New). The method of Claim 17 wherein at least one additional mutation is made to the A subunit of the cholera holotoxin at a position other than amino acid 29.

42. (New). The method of Claim 41 wherein the at least one additional mutation is made as a substitution for the arginine at amino acid 7, the aspartic acid at position 9, the arginine at position 11, the histidine at position 44, the valine at position 53, the arginine at position 54, the serine at position 61, the serine at position 63, the histidine at position 70, the valine at position 97, the tyrosine at position 104, the proline at position 106, the histidine at position 107, the serine at position 109, the glutamic acid at position 110, the glutamic acid at position 112, the serine at position 114, the tryptophan at position 127, the arginine at position 146 and the arginine at position 192.